Title (en)

DUAL-STAGE METHOD FOR THE REACTIVATION OF THERMALLY AGED NITROGEN OXIDE STORAGE CATALYSTS

Title (de)

ZWEISTUFIGES VERFAHREN ZUR REAKTIVIERUNG THERMISCH GEALTERTER STICKOXID-SPEICHERKATALYSATOREN

Title (fr)

PROCEDE EN DEUX ETAPES DE REACTIVATION DE CATALYSEURS-ACCUMULATEURS D'OXYDES D'AZOTE THERMIQUEMENT VIEILLIS

Publication

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Application

**EP 08736263 A 20080416**

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Abstract (en)

[origin: US2010300077A1] Nitrogen oxide storage catalysts are used to remove the nitrogen oxides present in the lean exhaust gas of lean-burn engines. As a result of the stress due to high temperatures in vehicle operation, they are subject to thermal aging processes which affect both the nitrogen oxide storage components and the noble metals present as catalytically active components. The present invention provides a process with which the catalytic activity of a nitrogen oxide storage catalyst which comprises, in addition to platinum as a catalytically active component, basic compounds of strontium and/or barium on a support material comprising cerium oxide, said catalytic activity being lost owing to the thermal aging process, can be at least partly restored. The two-stage process is based on the fact that strontium and/or barium compounds formed during the thermal aging with the support material, which also comprise platinum, are recycled to the catalytically active forms by controlled treatment with specific gas mixtures.

IPC 8 full level

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